

VERMONT DEPARTMENT of HEALTH

PLEASE READ INSTRUCTIONS CAREFULLY BEFORE COLLECTING SPECIMEN/SAMPLE

In order to comply with postal regulations and ensure the safety of laboratory personnel and others involved in the transport of specimens, and to maintain integrity of the specimen/sample, the Vermont Department of Health Laboratory will accept for testing only those specimens that are packaged according to the instructions below.

Instructions for Capillary Blood Lead Sample Collection

It is imperative that all steps be carried out with meticulous attention to detail, in order to minimize the risk of contaminating the sample with lead. A large majority of false positive capillary sample tests are due to errors in sampling technique.

A. Equipment Needed

1. Sterile isopropyl (70%) alcohol pads
2. Gauze pads (may be nonsterile)
3. Lancet for creating fingerstick or heelstick
4. Capillary lead testing kit from VDH Laboratory: includes plastic Microvette tube with EDTA; name label; analysis request form; lock-seal bag marked "BIOHAZARD"; and mailing tube
5. Sterile adhesive strip

B. Preparing the site

1. Universal precautions must be observed throughout the procedure. This includes pre- and post-testing cleansing of the testing surface as you normally do in your practice.
2. Pre-testing preparation:
 - a. Set out sample collection materials on clean work surface.
 - b. Loosen Microvette from its outer container and remove cap, which fits over its tip; place on clean work surface.
 - c. Fill out the name/date label on the lock-seal bag.
3. Sample site selection recommendations:
 - a. Infants up to 1 year: use of the plantar surface of the heel is recommended.
 - b. Children aged 1 year and over: use the palmar surface of the fingertip slightly to either side of the pad, not the very tip.

C. Collecting the Sample

1. Put on disposable gloves.
2. For heelstick: Massage the site to be punctured for about 30 seconds with an alcohol wipe. Thoroughly dry the site with a gauze pad by gently massaging the area for approximately 15 seconds.

3. For fingerstick: Massage the distal 2/3 of the finger for about 30 seconds with an alcohol wipe. Thoroughly dry the site with a gauze pad by massaging the finger for approximately 30 seconds. If child's hand (or heel) is visibly dirty, wash with soap and water prior to the procedure.

4. Perform the stick using an appropriate lancet for the site selected.

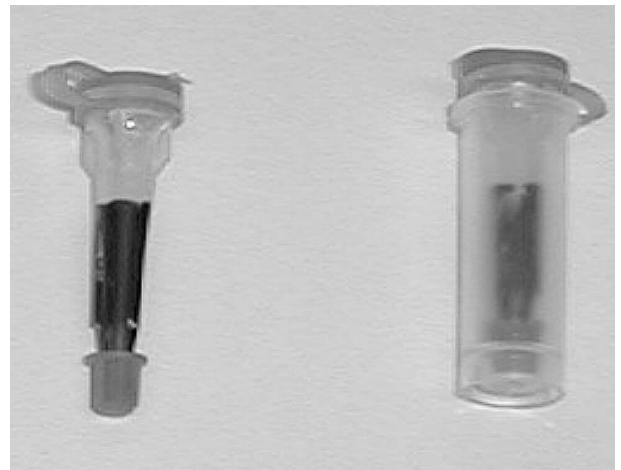
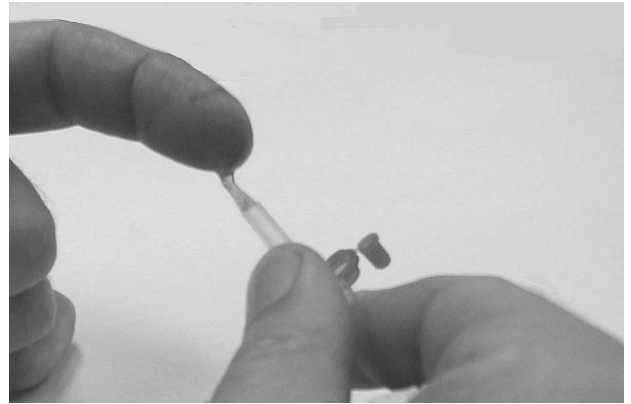
5. Wipe away first drop of blood with a clean gauze pad.

6. Hold capillary tip of Microvette almost horizontal to the drop of blood to facilitate filling. You may need to try different angles to enhance capillary action, while being cautious that blood does not drip out the open end.

7. **Tube should be at least half-full.** An amount which is just enough to cover the flared "wings" of the tube may be sufficient. Small volumes of sample may restrict the laboratory from being able to provide a blood lead analysis result.

8. Cover tip of tube with cap then seal wide end of tube with attached cover.

9. Insert collecting tube into outer container and snap down. Tap both ends of the packaged sample vigorously against the table top several times. This **essential** step will provide better mixing of the blood with the EDTA anticoagulant to prevent the formation micro-clots which could potentially interfere with reliable sample analysis.



D. Submitting the Sample

1. Place tube in pre-labeled lock-seal bag marked "Biohazard." Write sample donor name and date of birth on the label.
2. Complete all applicable sections of the "Request for Blood Lead Analysis" form, Chem 204 (01/95).
3. Place sample and request form into the pre-labeled mailer.
4. Mail or deliver to the State Public Health Laboratory promptly. If unable to send that day, it is recommended that you refrigerate until able to do so.

THE LABORATORY WILL DECONTAMINATE AND DISCARD ANY SPECIMEN/SAMPLE WHICH IS IMPROPERLY PACKAGED AND MAY PRESENT A RISK TO PERSONNEL.

If you have any comments or suggestions regarding these instructions, please call:

VERMONT DEPARTMENT OF HEALTH LABORATORY
195 COLCHESTER AVE. P.O. BOX 1125
BURLINGTON, VT 05402-1125
802-863-7335 1-800-660-9997(VT ONLY)